In the claims:

Claims 1-2. (Canceled)

3. (Currently Amended) The method of claim ~~2~~ 24 wherein the substrate is a silicon wafer.

4. (Original) The method of claim 3 wherein growing the SWNTs on a silicon wafer comprises the steps of:

depositing on said wafer a metallic catalytic material;

placing said silicon wafer in a CVD furnace; and

exposing said silicon wafers to a gaseous atmosphere comprising a carbon containing gas.

5. (Original) The method of claim 4 wherein the metallic catalytic material is selected from the group consisting of metals, metal oxides, metallic salts, and metallic particles.

6. (Original) The method of claim 4 wherein the metallic catalytic material is in solution.

7. (Original) The method of claim 6 wherein the metallic catalytic material is selected from the group consisting of ferric salts, nickel salts, cobalt salts, platinum salts, molybdenum salts, and ruthenium salts.

8. (Original) The method of claim 7 wherein the metallic catalytic material is ferric nitrate.

9. (Original) The method of claim 6 wherein the solution comprises an alcohol.

10. (Original) The method of claim 9 wherein the alcohol is selected from the group consisting of methanol, ethanol, and isopropanol.

11. (Original) The method of claim 10 wherein the alcohol is isopropanol.

12. (Original) The method of claim 4 wherein the carbon containing gas is ethylene.

13. (Original) The method of claim 9 wherein the carbon containing gas is ethylene, the metallic catalytic material is ferric nitrate, and the alcohol is isopropanol.

14. (Canceled)

15. (Original) The method of claim 3 wherein growing the SWNTs on a silicon wafer comprises the steps of:

treating said silicon wafer with metallic colloid particles;

placing said silicon wafer in a CVD furnace; and

exposing said silicon wafers to a gaseous atmosphere comprising a carbon containing gas.

16. (Original) The method of claim 15 wherein the metallic colloid is selected from the group consisting of iron colloids, nickel colloids, cobalt colloids, platinum colloids, molybdenum colloids, and ruthenium colloids.

17. (Original) The method of claim 16 wherein the metallic colloid is an iron colloid.

18. (Original) The method of claim 15 wherein the carbon containing gas is ethylene.

19. (Original) The method of claim 15 wherein the metallic colloids have diameters of about 3-15 nm.

20. (Currently Amended) The method of claim ~~1~~ 24 wherein the SWNT has a diameter from about 2 nm to about 13 nm.

21. (Currently Amended) The method of claim ~~1~~ 24 wherein the SWNT has a diameter from about 2 nm to about 9 nm.

22. (Currently Amended) The method of claim ~~1~~ 24 wherein the SWNT has a diameter from about 3 nm to about 5 nm.

23. (Currently Amended) The method of claim ~~1~~ 24 wherein said tip bears an adhesive.

24. (Currently Amended) A method of fabricating a SWNT probe for use in atomic force microscopy, comprising:

growing SWNTs on a substrate using chemical vapor deposition;

imaging said substrate using an atomic force microscope comprising a tip;

attaching one of said SWNTs to said tip thereby producing a tip bearing a SWNT; and

heating said tip bearing a SWNT ~~to~~ from 900 to 1000 °C; thereby fabricating the SWNT probe.

Claims 25-36. (Canceled)